<Note> Mutual Genital Touch in the Mahale M-Group Chimpanzees

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Mutual Genital Touch in the Mahale M-Group Chimpanzees

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INTRODUCTION

Mutual genital touch (MGT) is a type of greeting behavior, which was first documented in the chimpanzees of Bossou, Guinea (Nakamura & Nishida 2006). MGT occurs when two female chimpanzees meet after some time apart, they approach and closely pass by each other, pause with one's face close to the other's hip, and then they simultaneously and gently touch each other's genital area from underneath with the outer hand (*ibid.*; Figure 1). Nakamura and Nishida (2006) suggested that MGT is a type of greeting behavior between females as its context is similar to some other greeting behaviors, such as peering into the face, kissing, or extending a hand. They also stated that MGT had never been observed at Mahale. In addition, this behavior has not been reported from other

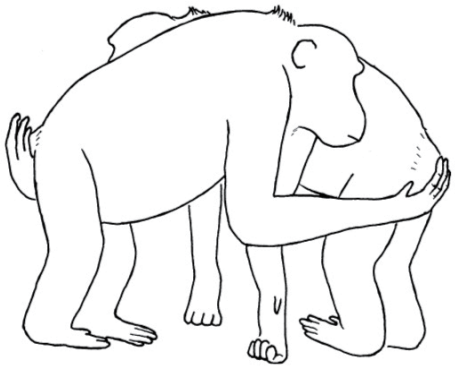

Figure 1. Mutual genital touch (reproduced with permission from Nakamura and Nishida (2006)).

study sites.

However, during 2015, I observed two instances of MGT in the M-group chimpanzees at Mahale, Tanzania, as reported here in detail (See Nakamura *et al.* (2015) for the details of the Mahale M-group chimpanzees).

OBSERVATIONS

Case 1 on December 9, 2015

At approximately 12:50 h, a large party of the M-group chimpanzees ranged northward along a trail. Some individuals wandered into nearby bush, whereas others exited from the bush and entered the trail. I followed the alpha male walking along the trail. After some time, the alpha male overtook some adult females walking in a line and disappeared from view, following which I slowly followed after the females. At 13:24 h, an adolescent female, GN, exited the bush, entered the trail, and approached an adult female, EF, walking at the end of the line, thereby coming directly in front of me. EF stamped on her right foot once, following which GN came close to EF from her right side, brought her face toward EF's hip, and touched EF's genital area with her left hand. EF also simultaneously touched GN's genital area with her left hand. Both EF and GN showed no genital swelling. Subsequently, EF and GN left together along the trail.

Case 2 on December 9, 2015

The party described in Case 1 ranged further north and encountered another party, including some adult females and their offspring, at 14:30 h. I continued following EF. When EF encountered the other party, a lactating female, ZL, showing no genital swelling, approached EF, and they simultaneously touched each other's genital area with their left hands. The infant of ZL, two years old at that time, was out of my sight at the moment. They soon left together without any subsequent interactions.

DISCUSSION

Although MGT at Mahale has not been previously reported, I observed two instances of MGT in a single day. The adult female, EF, was involved in both instances; however, I did not witness any more MGT while following EF. Although I carefully observed many subsequent encounters between females, no other instances of MGT occurred. In some instances, only one female of a pair touched the other's genital area, similar to instances of genital inspection customarily performed by adult males on females at Mahale (Nishida 1970, 1997; Nishida *et al.* 1999). The fact that these two instances of MGT occurred during an encounter between two females is consistent with the presumption by Nakamura and Nishida (2006) that MGT is a type of greeting behavior between females.

The reason why I managed to observe two instances of MGT in a single day remains unclear. I suggest some plausible but not mutually exclusive reasons as follows: 1) the Mahale M-group chimpanzees have recently adopted the MGT behavior, which is getting prevalent; 2) only a few individuals are accustomed to performing MGT in the M-group, and we rarely observe MGT because of its low frequency; 3) we researchers are not sufficiently attentive to notice any quick MGT as we have to assess all the individuals and monitor the surrounding situation when a social encounter occurs. The first proposed reason is plausible, and we have need to ascertain the manner in which MGT will be getting increasingly prevalent in the group. The second proposed reason is also plausible; however, further investigation on the presence/absence of MGT in the behavioral repertoire of the M-group members is required to derive any conclusions. From these two observed instances, I presumed that the chimpanzees performed MGT quite naturally as if it was a habitual behavior rather than an unusual one. This implies that at least some members have included MGT in their behavioral repertoires and that they perform it in a habitual manner. The third presumption is not likely as many expert researchers have conducted long-term, intensive observations on chimpanzee behaviors, and it is unlikely that the rarity of the observation of MGT can be attributed to the insufficient attention of the researchers. When I asked fellow researchers about MGT, some stated that they had observed MGT-like behaviors, one instance in 2011 and two instances in 2014 (Shunkichi Hanamura, Noriko Itoh, personal communication; Shimada 2014). In these previous instances observed by fellow researchers, at least one individual of a pair exhibiting MGT-like behavior was an adolescent female who had immigrated to the M-group a few years ago, as was the case with GN in Case 1 of the present study who had immigrated to the M-group in 2012. This implies that MGT is a relatively new behavioral pattern recently introduced to the M-group chimpanzees from another group. On the other hand, the fact that MGT was performed between two adult females, EF and ZL, who had immigrated to the M-group in 1997 and 1998, respectively, implies that MGT was already prevalent in the group. However, further investigation is required to derive any conclusions on MGT in the Mahale M-group chimpanzees.

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<NOTE>
An Infant Bonobo Mimicked a Handicapped Motor Action of a Disabled Individual at Wamba in the Luo Scientific Reserve, Democratic Republic of Congo

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INTRODUCTION

Imitative abilities to copy the behaviors of others are important for humans to acquire novel skills (Tomasello *et al.* 1993). Scientific research has focused on whether non-human primates have these abilities, and experimental imitation studies in our nearest primates have been carried out (reviewed by Whiten 2015). Based on cognitive experiments of captive great apes, their leaning processes were classified as "emulation" to reproduce desirable results of the actions of others, rather than "imitations" to reproduce the behavior itself (Whiten *et al.* 2004). Another experimental evidences indicated that chimpanzees imitate others' actions, whereas they are less sensitive to body movements than to manipulated objects involved in the demonstrated actions (Myowa-Yamakoshi & Matsuzawa 1999). However, it remained unclear whether great apes can learn to reproduce novel motor actions by bodily matching.

"Do-as-I-do" experiments of chimpanzees provided positive evidence that they can copy the form of human actions through a battery of training actions (Custance *et al.* 1995). Moreover, Fuhrmann *et al.* (2014) provided the first quantitative evidence for motor copying with synchrony between the movements of the observers and models in chimpanzees and orangutans. This learning behavior was referred to as "mimicking" rather than imitation in that copying motor actions did not have a physical goal to reproduce desirable results of the models' actions. Nevertheless, these experiments showed that great apes have the capacity to learn novel and simple motor actions by bodily matching.

Observations of social learning in great apes under natural conditions are valuable, because experience of cognitive experiments in captivity can affect and enhance the enculturated skills of these apes (Hirata *et al.* 2009). At Bossou in Guinea, infant chimpanzees acquired stone-nut manipulation through close observations of skilled manipulation by adult individuals (Inoue-Nakamura & Matsuzawa 1997). Hobaiter and Byrne (2010) reported that young chimpanzees copied a motor procedure with a liana-scratch technique from a disabled chimpanzee at the Budongo Forest Reserve in Uganda. However, no reports exist of motor mimicking based on visual information of the body movements of others in wild conditions. We observed an instance of an infant bonobo (*Pan paniscus*) mimicking a handicapped motor action spontaneously from a disabled individual at Wamba. This report could be the first evidence of motor mimicking in wild infant bonobos.

STUDY SITE & BACKGROUND

Observational study of bonobo behaviors was carried out at Wamba in the Luo Scientific Reserve, Democratic Republic of Congo. One main study group of bonobos (E1) was habituated fully and the all members were identified. At the time of the present observation, the E1 group consisted of 34 individuals: 8 adult males, 8 adult females, 4 adolescents, 6 juveniles, and 6 infants. Researchers and field assistants followed the largest party daily as far as possible from bed to bed (around 06:00 to 17:00 h), and recorded *ad libitum* behaviors of bonobos.

Snare injuries to wild chimpanzees are serious problems at some study sites (Quiatt *et al.* 2002). Although the use of traditional techniques is allowed at Wamba in the Luo Scientific Reserve, the use of metallic snares is prohibited to protect primates (Furuichi *et al.* 2012). However, Wamba bonobos are sometimes caught and injured by metallic snares.

An adolescent female (Pf) immigrated into the E1 group from the western adjacent group in October 15,

Figure 1. Adult females rescuing Pf from a metallic snare? Adult females surrounded Pf to peer at her hand ensnared by the metallic snare. One female were pulling the metallic snare in this picture taken by TF.